

## United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/611,647	07/01/2003	Qu Zhigang	NOKM.052PA	2079	
40581	7590 04/20/2005		EXAM	EXAMINER	
CRAWFORD MAUNU PLLC			PHUONG, DAI		
1270 NORTHI ST. PAUL, M	LAND DRIVE, SUITE 390 N=55120		ART UNIT	PAPER NUMBER	
<b>51</b> , 111 <b>0</b> _, 111			2685		
	DA		DATE MAILED: 04/20/2003	5	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/611,647	ZHIGANG, QU				
Office Action Summary	Examiner	Art Unit				
	Dai A Phuong	2685				
The MAILING DATE of this communicat	ion appears on the cover sheet w	ith the correspondence addres	SS			
Period for Reply						
A SHORTENED STATUTORY PERIOD FOR THE MAILING DATE OF THIS COMMUNICA  - Extensions of time may be available under the provisions of 37 after SIX (6) MONTHS from the mailing date of this communica  - If the period for reply specified above is less than thirty (30) da  - If NO period for reply is specified above, the maximum statutor  - Failure to reply within the set or extended period for reply will, I Any reply received by the Office later than three months after the earned patent term adjustment. See 37 CFR 1.704(b).	TION.  7 CFR 1.136(a). In no event, however, may a ation.  1 ys, a reply within the statutory minimum of thir y period will apply and will expire SIX (6) MOI by statute, cause the application to become Al	reply be timely filed rty (30) days will be considered timely. NTHS from the mailing date of this commu BANDONED (35 U.S.C. § 133).	inication.			
Status						
1)⊠ Responsive to communication(s) filed o	n 01 July 2003					
	☐ This action is non-final.					
		ters, prosecution as to the me	erits is			
,	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
·		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
Disposition of Claims						
4)⊠ Claim(s) <u>1-19</u> is/are pending in the appl	ication.					
4a) Of the above claim(s) is/are w	vithdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-19</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction	and/or election requirement.					
Application Papers						
9) The specification is objected to by the Ex	xaminer.					
10)⊠ The drawing(s) filed on <u>01 July 2003</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
	Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).					
11) The oath or declaration is objected to by	•					
Priority under 35 U.S.C. § 119						
12)  Acknowledgment is made of a claim for t a) All b) Some * c) None of:	foreign priority under 35 U.S.C.	§ 119(a)-(d) or (f).				
<ol> <li>Certified copies of the priority doc</li> </ol>	uments have been received.					
<ol><li>Certified copies of the priority doc</li></ol>	uments have been received in A	Application No				
<ol><li>Copies of the certified copies of the</li></ol>	ne priority documents have been	received in this National Stag	ge			
application from the International	Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action fo	r a list of the certified copies not	received.				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview	Summary (PTO-413)				
2) Notice of Draftsperson's Patent Drawing Review (PTO-	948) Paper No(	(s)/Mail Date				
<ol> <li>Information Disclosure Statement(s) (PTO-1449 or PTC Paper No(s)/Mail Date</li> </ol>	0/SB/08) 5)   Notice of I 6)   Other:	Informal Patent Application (PTO-152	<del>(</del> )			

## **DETAILED ACTION**

## Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claim 18 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claim 18 is drawn to a "proxy", i.e., a "computer program" per se, as recited in the preamble and as such is non-statutory subject matter. See MPEP § 2106.IV.B.1.a. Data structures not claimed as embodied in computer readable media are descriptive material per se and are not statutory because they are not capable of causing functional change in the computer. See, e.g., Warmerdam, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory). Such claimed data structures do not define any structural and functional interrelationships between the data structure and other claimed aspects of the invention, which permit the data structure's functionality to be realized. In contrast, a claimed computer readable medium encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory. Similarly, computer programs claimed as computer listings per se, i.e., the descriptions or expressions of the programs are not physical "things." They are neither computer components nor statutory processes, as they are not "acts" being performed. Such claimed computer programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer, which permit the computer program's functionality to be Application/Control Number: 10/611,647 Page 3

Art Unit: 2685

realized.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United

States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 4-5, 9-13 and 16-19 are rejected under 35 U.S.C. 102(e) as being anticipated by

Lin et al. (Pub. No: 2003/0028612).

Regarding claim 1, Lin et al. disclose a method for retrieving content from a mobile

terminal operating as a server within a network ([0024]), comprising: receiving a request for data

from the network 216 ([0029]); modifying parameters of the request to indicate that the mobile

terminal is the source of the content ([0036] to [0037]); forwarding the modified request to the

mobile terminal ([0038]); and supplying content from the mobile terminal in response to the

modified request ([0038]).

Regarding claim 4, Lin et al. disclose all the limitation in claim 1. Further, Lin et al.

disclose the method wherein forwarding the modified request to the mobile terminal comprises

using a Session Initiation Request (SIR) (fig. 3, [0029 and [0031]. Inherently, when client

devices 216 request server service for access to a Web page or Web site provided by mobile

server 100 (user equipment 204). Next, the mobile server 100 sends request to support node 210

to provide a service server. Therefore, the request message sends from clients 216 to user equipment 204 (mobile server 100) which also includes a Session Initiation Request).

Regarding claim 5, Lin et al. disclose all the limitation in claim 4. Further, Lin et al. disclose the method wherein the SIR requests the mobile terminal to establish a Transmission Control Protocol (TCP) connection with a network proxy prior to supplying content from the mobile terminal ([0031] to [0033]).

Regarding claim 9, Lin et al. disclose a mobile server system ([0024]), comprising: a network terminal 212 coupled to transmit a content request ([0027]); a proxy 214 coupled to receive the content request and arranged to modify the content request ([0028]); and a mobile terminal 204 coupled to the proxy to receive the modified request ([0026]), wherein the modified request indicates that the mobile terminal is operating as a mobile server to provide the requested content to the network terminal ([0029]).

Regarding claim 10, Lin et al. disclose all the limitation in claim 9. Further, Lin et al. disclose the mobile server system according to claim 9, wherein the proxy modifies the content request by replacing a Uniform Resource Locator (URL) of the content request with a keyword denoting the mobile terminal as the mobile server ([0031] and [0032]. Notice that, the user equipment 24 sends the request to support node 210. The request is such as the IP address or domain name for the user equipment or the user's server. When the request is granted, the support node 210 sets up a process that maps the public network address of user equipment 204 to an address of a virtual server).

Regarding claim 11, Lin et al. disclose all the limitation in claim 10. Further, Lin et al. disclose the mobile server system wherein the proxy utilizes Wireless Application Protocol (WAP) procedures to establish a connection with the mobile terminal ([0028]).

Regarding claim 12, Lin et al. disclose all the limitation in claim 11. Further, Lin et al. disclose the mobile server system wherein the WAP procedure includes a Session Initiation Request (SIR) (fig. 3, [0029 and [0031]. Inherently, when client devices 216 request server service for access to a Web page or Web site provided by mobile server 100 (user equipment 204). Next, the mobile server 100 sends request to support node 210 to provide a service server. Therefore, the request message sends from clients 216 to user equipment 204 (mobile server 100) which also includes a Session Initiation Request).

Regarding claim 13, Lin et al. disclose all the limitation in claim 12. Further, Lin et al. disclose the mobile server system wherein the SIR requests establishment of a Transmission Control Protocol (TCP) connection prior to providing the requested content to the network terminal ([0036]).

Regarding claim 16, Lin et al. disclose a mobile terminal wirelessly 216 coupled to a network which includes a network element 212 capable of relaying modified content requests to the mobile terminal 204 (fig. 3, [0024]), the mobile terminal comprising: a memory capable of storing at least a protocol module and a server directory containing requested content 108 ([0019]); a processor coupled to the memory and configured by the protocol module to provide the requested content to the network element in response to the modified content request ([0019]. Inherently, the mobile server 100 comprises a processor to perform these functions); and a transceiver configured to facilitate the requested content exchange with the network element

Application/Control Number: 10/611,647 Page 6

Art Unit: 2685

([0024]), wherein the modified content request received from the network element indicates that

the mobile terminal is a server for the requested content ([0029]).

Regarding claim 17, Lin et al. disclose a computer-readable medium having instructions

stored thereon which are executable by a mobile terminal for supplying content by performing

steps comprising: receiving a content request ([0019]); identifying a first parameter in the

content request designating the mobile terminal as a content server ([0019]); and identifying a

second parameter in the content request designating a location of the content to be supplied

([0019]).

Regarding claim 18, Lin et al. disclose a proxy 214 within a network used to facilitate

content retrieval from a mobile server, comprising: means for receiving content requests

([0029]); means for modifying the content requests ([0032]); means for transmitting the modified

content requests to the mobile server ([0038]); and means for receiving content from the mobile

server in response to the modified content request ([0038]).

Regarding claim 19, Lin et al. disclose a computer-readable medium having instructions

stored thereon which are executable by a network proxy for facilitating content retrieval from a

mobile server by performing steps comprising: receiving content requests from network elements

([0025]); modifying the content requests to designate a mobile terminal as the mobile server

([0025]); forwarding the modified content requests to the mobile terminal ([0025]); and receiving

content from the mobile terminal in response to the modified content requests ([0025]).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

Art Unit: 2685

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (Pub. No: 2003/0028612) in view of Mulligan et al. (Pub. No: 2003/0105864).

Regarding claim 2, Lin et al. disclose all the limitation in claim 1. But, Lin et al. do not disclose the method wherein the request is addressed to the mobile terminal by using a Mobile Station International Integrated Services Digital Network Number (MSISDN) associated with the mobile terminal.

In the same field of endeavor, Mulligan et al. disclose the method wherein the request is addressed to the mobile terminal by using a Mobile Station International Integrated Services Digital Network Number (MSISDN) associated with the mobile terminal ([0064]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mobile server of Lin et al. by specifically including the request is addressed to the mobile terminal by using a Mobile Station International Integrated Services Digital Network Number (MSISDN) associated with the mobile terminal, as taught by Mulligan et al., the motivation being in order to access to service functionality available on landline or wireless network.

Regarding claim 3, the combination of Lin et al. and Mulligan et al. disclose all the limitation in claim 1. Further, Lin et al. disclose the method wherein modifying the parameters of the request comprises: removing the MSISDN transmitted with the request ([0031] and [0032]); and replacing the MSISDN with a keyword that denotes the mobile terminal as a data

server ([0031] and [0032]. Notice that, the user equipment 24 sends the request to support node

Page 8

210. The request is such as the IP address or domain name for the user equipment or the user's

server. When the request is granted, the support node 210 sets up a process that maps the public

network address of user equipment 204 to an address of a virtual server).

7. Claims 6-7 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin

et al. (Pub. No: 2003/0028612) in view of Luna et al. (Pub. No: 2002/0123335).

Regarding claims 6 and 14, Lin et al. disclose all the limitation in claims 1 and 11

respectively. But, Lin et al. do not disclose the method wherein forwarding the modified request

to the mobile terminal comprises using a Service Loading (SL) content type.

However, Luna et al. disclose the method wherein forwarding the modified request to the

mobile terminal comprises using a Service Loading (SL) content type ([0025]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the

invention was made to modify the mobile server of Lin et al. by specifically forwarding the

modified request to the mobile terminal comprises using a Service Loading (SL) content type, as

taught by Luna et al., the motivation being in order to provision mobile stations that operate in

their networks.

Regarding claims 7 and 15, the combination of Lin et al. and Luna et al. disclose all the

limitation in claims 6 and 14 respectively. But, Lin et al. do not disclose the method wherein the

SL content type comprises: an action field indicating that the mobile terminal is a data server; a

pathname that indicates where the content is located within the mobile terminal; a username to

identify the requesting network element; and a password associated with the username.

However, Luna et al. disclose the method wherein the SL content type comprises: an action field indicating that the mobile terminal is a data server; a pathname that indicates where the content is located within the mobile terminal; a username to identify the requesting network element; and a password associated with the username ([0025]).

Page 9

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mobile server of Lin et al. by specifically including the SL content type comprises: an action field indicating that the mobile terminal is a data server; a pathname that indicates where the content is located within the mobile terminal; a username to identify the requesting network element; and a password associated with the username, as taught by Luna et al., the motivation being in order to provision mobile stations that operate in their networks.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lin et al. (Pub. No: 2003/0028612) in view of Luna et al. (Pub. No: 2002/0123335) and further in view of Wang et al. (Pub. No: 2003/0035409).

Regarding claim 8, the combination of Lin et al. and Luna et al. disclose all the limitation in claim 7. But, the combination of Lin et al. and Luna et al. do not disclose the method wherein the username includes the MSISDN of the requesting terminal.

However, Wang et al. disclose the method wherein the username includes the MSISDN of the requesting terminal ([0023]).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the mobile server of Lin et al. by specifically disclose the method

Application/Control Number: 10/611,647 Page 10

Art Unit: 2685

wherein the username includes the MSISDN of the requesting terminal, as taught by Wang et al., the motivation being in order to restrict devices from accessing any other end-point directly.

## Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Qi et al. (Pub. No: 20020028672) presentation of content from one cellular to another

Rouse et al. (Pub. No: 20020090933) access to scheduling application

Hosaka (Pub. No: 20030083052) information supply system

Tari et al. (Pub. No: 20030119486) recording medium therefor

Malville et al. (Pub. No: 20040172536) a public access terminal

Lagadec et al. (Pub. No: 20050025300) transmitting message

Skog et al. (Pub. No: 20020126708) message service routing system

Jokimen et al. (Pub. No: 20030027581) provisioning detection and notification

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dai A Phuong whose telephone number is 703-605-4373. The examiner can normally be reached on Monday to Friday, 9:00 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on 703-305-4385. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dai Phuong AU: 2685

Date: 04-14-2005